

## Water-Data Report 2008

**01381260 DISMAL BROOK AT MOUNT PLEASANT ROAD, AT MOUNT FREEDOM, NJ**

PASSAIC RIVER BASIN

LOCATION.--Lat 40°48'43", long 74°34'09" referenced to North American Datum of 1983, Mendham Township, Morris County, NJ, Hydrologic Unit 02030103, at bridge on Mount Pleasant Road, 120 ft upstream from unnamed pond, 660 ft northeast from Lake Drive, 1.0 mi south from Mount Freedom, and 1.2 mi north of Brookside.

DRAINAGE AREA.--0.99 mi<sup>2</sup>.

**WATER-QUALITY RECORDS**

PERIOD OF RECORD.--Water years 2007-08.

REMARKS.--Cooperative Network Site Descriptor: Statewide Status, NJ Department of Environmental Protection Watershed Management Area 6.

COOPERATION.--Physical measurements and samples for laboratory analysis were provided by personnel of the NJ Department of the NJ Department of Environmental Protection. Determinations of dissolved ammonia, dissolved orthophosphate, suspended residue, ammonia-plus-organic nitrogen in bed sediment, and phosphorus in bed sediment were performed by the NJ Department of Health and Senior Services, Environmental and Chemical Laboratory.

**WATER-QUALITY DATA  
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**

Part 1 of 5

[Remark codes: &lt;, less than; E, estimated.]

Date	Time	Turbidity white light, det ang 90+/-30 corrctd	UV absorb- ance, 254 nm, wat flt units	UV absorb- ance, 280 nm, wat flt units	Baro- metric pres- sure, mm Hg	Dis- solved oxygen, mg/L (00025)	Dis- solved oxygen, percent of sat- uration (00300)	pH, water, unfltrd field, std units (00400)	Specif- ic conduc- tance, wat unf μS/cm (00095)	Temper- ature, deg C (25 degC (00020))	Temper- ature, air, deg C (00010)	Temper- ature, water, deg C (00010)	Hard- ness, water, mg/L as CaCO <sub>3</sub> (00900)	Calcium water, fltrd, mg/L (00915)
Dec 04...	0830	.6	.096	.074	734	12.4	90	7.5	596	4.5	2.2	110	28.4	
Feb 27...	0815	1.1	.055	.041	730	11.2	85	7.3	588	.5	3.8	78	20.7	
Jun 03...	0745	1.1	.034	.026	744	9.2	86	7.6	474	17.0	12.7	110	29.1	
Aug 12...	0845	2.3	.086	.065	741	8.9	89	7.7	395	18.0	15.2	100	25.9	

## 01381260 DISMAL BROOK AT MOUNT PLEASANT ROAD, AT MOUNT FREEDOM, NJ—Continued

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**

Part 2 of 5

[Remark codes: &lt;, less than; E, estimated.]

Date	ANC, wat unf fixed end pt,						Chlor- ide, water, fltrd, mg/L as CaCO <sub>3</sub>	Fluor- ide, water, fltrd, mg/L	Silica, water, fltrd, mg/L as SiO <sub>2</sub>	Sulfate water, fltrd, mg/L	Residue water, fltrd, sum of consti- tuents mg/L	Residue on evap. at 180degC wat flt mg/L	Residue total non- filter- able, mg/L	Ammonia	
	Magnes- ium, water, fltrd, mg/L (00925)	Potas- sium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	lab, mg/L as CaCO <sub>3</sub>	(90410)	(00940)							org-N, water, fltrd, mg/L as N (00623)	Ammonia water, fltrd, mg/L as N (00608)	
Dec 04...	9.49	2.09	66.7	39	145	E.07	17.5	11.5	E309	300	1	.17	.029		
Feb 27...	6.50	2.04	70.9	25	147	<.12	13.2	11.2	293	312	4	E.14	.012		
Jun 03...	9.11	2.26	40.3	39	107	<.12	18.3	10.8	E248	299	2	E.10	.012		
Aug 12...	8.59	2.24	32.1	42	83.5	<.12	17.3	9.88	210	265	6	.25	<.010		

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**

Part 3 of 5

[Remark codes: &lt;, less than; E, estimated.]

Date	Nitrate + nitrite water fltrd, mg/L as N (00631)	Partic- ulate nitro- gen, water, fltrd, mg/L (49570)	Total nitro- gen, water, fltrd, unfltrd mg/L (00602)	Total nitro- gen, water, unfltrd mg/L (00600)	Ortho- phos- phate, water, fltrd, mg/L as P (00671)	Phos- phorus, water, fltrd, mg/L as P (00666)	Phos- phorus, water, unfltrd, mg/L as P (00665)	Total carbon, suspd sediment mg/L	Inor- ganic carbon, suspd sediment mg/L	Organic carbon, suspd sediment mg/L	Organic carbon, water, fltrd, mg/L	Arsenic water, fltrd, μg/L (01000)	Arsenic water, unfltrd μg/L (01002)
								(00694)	(00688)	(00689)	(00681)		
Dec 04...	1.07	<.04	1.2	--	E.005	E.004	E.006	E.1	<.04	<.1	2.8	--	--
Feb 27...	1.43	E.02	E1.6	E1.6	<.010	<.008	E.006	E.1	<.04	<.1	1.8	.13	<.60
Jun 03...	1.86	.04	E2.0	E2.0	E.009	E.006	.013	.4	<.04	.4	1.3	--	--
Aug 12...	1.17	E.04	1.4	E1.5	.011	.012	.020	.3	<.04	.3	2.8	.15	<.60

**01381260 DISMAL BROOK AT MOUNT PLEASANT ROAD, AT MOUNT FREEDOM, NJ—Continued**

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**

Part 4 of 5

[Remark codes: &lt;, less than; E, estimated.]

Date	Barium, water, unfltrd recover -able, μg/L (01007)	Beryll- ium, water, unfltrd recover -able, μg/L (01012)	Boron, water, unfltrd recover -able, μg/L (01020)	Boron, water, unfltrd recover -able, μg/L (01022)	Cadmium water, unfltrd recover -able, μg/L (01027)	Chrom- ium, water, unfltrd recover -able, μg/L (01034)	Copper, water, unfltrd recover -able, μg/L (01042)	Iron, water, unfltrd recover -able, μg/L (01045)	Lead, water, unfltrd recover -able, μg/L (01051)	Mangan- ese, water, unfltrd recover -able, μg/L (01055)	Mercury water, unfltrd recover -able, μg/L (71900)	Nickel, water, unfltrd recover -able, μg/L (01067)	Selen- ium, water, unfltrd recover -able, μg/L (01147)
Dec 04...	--	--	11	--	--	--	--	--	--	--	--	--	--
Feb 27...	100	E.03	9.4	9	.04	E.27	<1.2	73	.14	18.0	<.010	.48	.21
Jun 03...	--	--	9.8	--	--	--	--	--	--	--	--	--	--
Aug 12...	74.7	<.04	10	11	.03	<.40	E1.1	179	.31	8.1	<.010	.20	.20

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2007**  
**TO SEPTEMBER 2008**

Part 5 of 5

[Remark codes: <, less than;  
E, estimated.]

Date	Silver, water, unfltrd recover -able, μg/L (01077)	Zinc, water, unfltrd recover -able, μg/L (01092)
Dec 04...	--	--
Feb 27...	<.02	5.2
Jun 03...	--	--
Aug 12...	<.02	3.8

## 01381260 DISMAL BROOK AT MOUNT PLEASANT ROAD, AT MOUNT FREEDOM, NJ—Continued

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**

Part 1 of 4

[Remark codes: &lt;, less than; E, estimated.]

Date	Time	pH bed sedimnt std	Ammonia + org-N, bed sed	Phos- phorus, bed sedimnt	Inor- ganic Total carbon, bed bed sedimnt	Arsenic bed sedimnt	Cadmium bed sedimnt	Chrom- ium, bed bed bed sedimnt	Cobalt bed sedimnt	Copper, bed bed sedimnt	Iron, bed sedimnt	Lead, bed sedimnt	
		units (70310)	mg/kg as N (00626)	mg/kg as P (00668)	g/kg (00693)	total, g/kg (00686)	-able, ug/g (64847)	-able, ug/g (01028)	-able, ug/g (01029)	-able, ug/g (01038)	-able, ug/g (01043)	-able, ug/g (01170)	
Aug 12...	1030	7.40	150	2,200	1.9	<.2	1.1	.170	10	4.6	10	13,000	6.5

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**

Part 2 of 4

[Remark codes: &lt;, less than; E, estimated.]

Date	Mangan- ese, bed sedimnt recover -able, ug/g (01053)	Mercury bed sedimnt recover -able, ug/g (71921)	Nickel, bed sedimnt recover -able, ug/g (01068)	Sele- nium, bed sedimnt recover -able, ug/g (64848)	Zinc, bed sedimnt recover -able, ug/g (01093)	1,2-Di- methyl- naphth- alene, <2 mm, ug/kg (49403)	1,6-Di- methyl- naphth- alene, <2 mm, ug/kg (49404)	1Methyl -9H- fluor- ene, <2 mm, ug/kg (49398)	1-Methyl- phenan- threne, <2 mm, ug/kg (49410)	1- Methyl- pyrene, ws nat (49388)	236Tri- methyl- naphth- alene, <2 mm, ug/kg (49405)	2,6-Di- methyl- naphth- alene, <2 mm, ug/kg (49406)	2-Ethyl naphth- alene bed sed bed sed bed sed bed sed ws nat ws nat ws nat ws nat
Aug 12...	330	<.007	5.6	.1	57	E2	E5	E5	E40	E25	E3	E7	E2

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**

Part 3 of 4

[Remark codes: &lt;, less than; E, estimated.]

Date	2- Methyl- anthra- cene, bed sed <2 mm, bs <2mm	4H-Cyc- lopenta -def]- ene, bed sed <2 mm,	9H- Fluor- ene, bed sed <2 mm,	Ace- naphth- ylene, bed sed <2 mm,	Ace- naphth- ylene, bed sed wsv nat	Anthra- cene, <2 mm, wsv nat	Benzo- [a]- anthra- cene, bed sed field, <2 mm,	Benzo- [a]- pyrene, bed sed wsv nat	Benzo- [b]- anthene <2 mm, bed sed	Benzo- [ghi]- peryl- ene, bed sed	Benzo- [k]- anthene <2 mm, bed sed	Chry- sene, bed sed wsv nat	Dibenzo -[a,h]- anthra- cene, bed sed field, <2 mm,
Aug 12...	ug/kg (49435)	ug/kg (49411)	ug/kg (49399)	ug/kg (49429)	ug/kg (49428)	ug/kg (49434)	ug/kg (49436)	ug/kg (49389)	ug/kg (49458)	ug/kg (49408)	ug/kg (49397)	ug/kg (49450)	ug/kg (49461)

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**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**

Part 4 of 4

[Remark codes: &lt;, less than; E, estimated.]

Date	Fluor-anthene <2 mm wsv nat field, ug/kg (49466)	Indeno-[1,2,- 3-cd]- bed sed bed sed wsv nat field, ug/kg (49390)	Iso-phorone bed sed <2 mm, wsv nat field, ug/kg (49400)	Naphth-alene, bed sed <2 mm bed sed wsv nat wsv nat sedimnt	p-Cresol, PCBs, ug/kg (49402)	Phenan-threne, bed sed <2 mm, wsv nat field, ug/kg (39519)	Phenan-threne, bed sed <2 mm, wsv nat field, ug/kg (49451)	Pyrene, bed sed <2 mm, wsv nat field, ug/kg (49409)	Bed sediment, dry svd sve dia percent <62.5um (80164)	
Aug 12...	410	E190	<50	E4	E3.83	<50	300	E9	350	.8